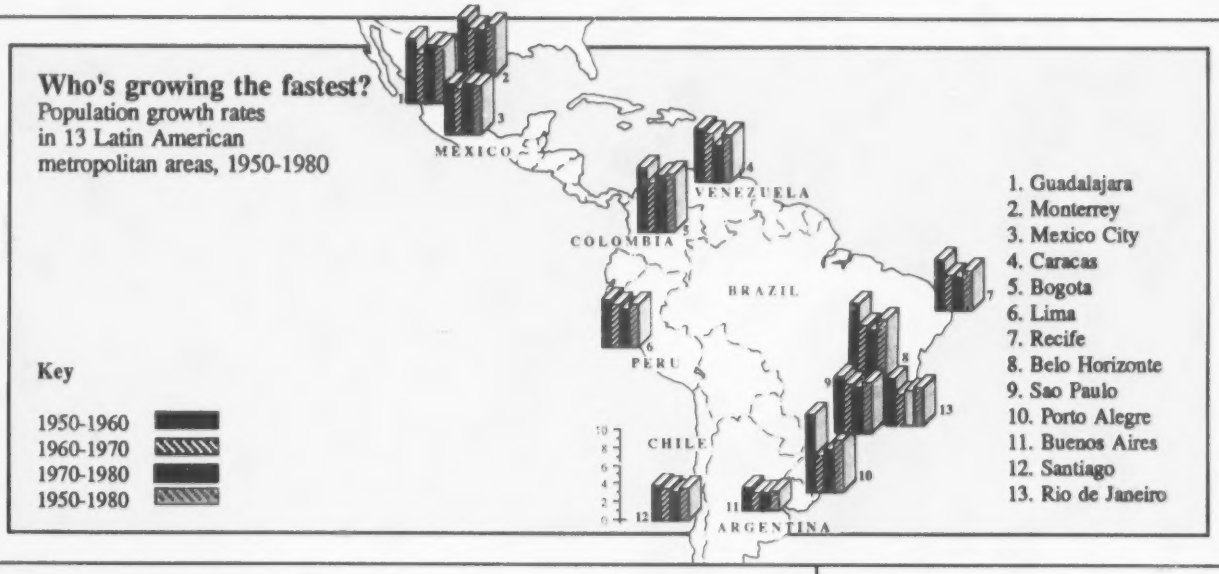
2/12/87 C0200-1

CONSUMER TRENDS AND MARKETS ABROAD
FEBRUARY 1987 VOLUME 6 NUMBER 2

International Demographics



AREA PROFILE

Latin America's supercity--the Metropolitan Area of Mexico City

In a region known for its supercities, Mexico City beats them all. Big and still growing, Mexico City and its environs is soon to be the world's largest metropolitan area. Its 1985 population, estimates the United Nations, topped18 million.

The lure of city amenities--jobs, health care, schooling, and cheap food--and the hope of a better life bring 1,000 rural migrants to Mexico City everyday. In-migration combined with the city's healthy rate of natural increase fuel the city's growth. Between 1950 and 1980, Mexico City grew at an annual average rate of 5.4 percent. By the year 2000, says the United Nations, the population of Mexico City and its environs will jump to 27.6 million people. And only 25 years later Mexico City's population is projected to be a terrifying 36.7 million.

Providing jobs and urban services on a timely basis to such mounting numbers of people would tax any system, no matter how well run or endowed. And complicating Mexico City's demographic dilemma is the general breakdown of the Mexican economy and the effects of September's earthquakes which left thousands camped in city streets and damaged buildings.

Falling revenues from oil exports--world petroleum prices plunged from $32 a barrel in 1981 to $14 a barrel in mid-1986--combined with the debt crisis brought on by years of borrowing to build Mexico's industrial sector have taken a heavy toll. Austerity measures taken in response the mounting crisis have reduced living standards and limited the supply of modern-sector jobs. Real wage levels have fallen 40

continued

INSIDE

Labor in Tokyo--The first in a three-part series.....8
Regions: Malaysia, Singapore, Canada, Europe.....11

THIS MONTH: MEXICO CITY

MACRO VIEW

Mexico City urban and metropolitan area

1. Cuautitlan
2. Tultitlan
3. Coacalco
4. Ecatepec
5. Zaragoza
6. Tlalnepantla
7. Naucalpan
8. Azcapotzalco
9. Huixquilucan
10. Miguel Hidalgo
11. Gustavo A. Madero
12. Cuauhtemoc
13. Venustiano Carranza
14. Ixtacalco
15. Netzahualcoyotl
16. Iztapalapa
17. La Paz
18. Chimalhuacan
19. Tlahuac
20. Xochimilco
21. Milpa Alta
22. Tlalpan
23. Coyoacan
24. Benito Juarez
25. Magdalena Contreras
26. Alvaro Obregon
27. Cuajimalpa

percent below what levels were at the end of 1981, according to Wharton Econometrics. Wages fell 13.6 percent in 1986 alone. And according to *The Wall Street Journal*, real wages in Mexico are back to 1967 levels.

With debt payments estimated to consume two-thirds of Mexico's export earnings in the foreseeable future, past policies of massive public investment and subsidies can no longer support the growth of the Mexican economy and the creation of all-important new jobs for the disproportionately large numbers of young people entering the job market. But the country's ability to develop the new export products needed to help the economy recover the $9 to $10 billion lost annually in oil revenues is questionable at best.

But, no one is sure whether crowding, the already severe housing crisis, made worse by Mexico's City's 1985 earthquake, job shortages, and air pollution will reduce population concentration in and around the nation's capital. So far, despite its mounting problems, Mexico City and its environs still draw hundreds of thousands of rural migrants a year. Part of its magnetism comes simply from its all-pervasive position at the helm of the nation.

Mexico City is typical of Latin American supercities, holding an impressive portion of the nation's population and commanding the lion's share of the country's economic activities. With 19.1 percent of the national population in 1980, the Metropolitan Area alone housed about as many inhabitants as Mexico's next 30 largest urban areas. With 15.1 million people in 1980, it is six times as large as Guadalajara, Mexico's second largest city.

Moreover, Mexico City accounted for 38 percent of the Gross Domestic Product (GDP), 48 percent of the country's manufacturing industry, 59 percent of all wages, 60 percent of all transportation, and 69 percent of all bank assets. Even those industries that have their operations in faraway parts of the country feel the need to establish their headquarters in Mexico City.

Just how big Mexico City can get, no one is willing to guess. Because no urban areas have ever before reached the sizes being projected for the world's supercities for 1990 and beyond, no one knows for sure what will happen. However, according to Harley L. Browning of the U.S. Census Bureau, the diseconomies of large scale (providing services to advancing satellite areas costs proportionately more than to core-city areas) and the development of internal markets creating employment opportunities in regional areas eventually take their toll on large-city growth.

ANATOMY OF THE CITY

The Mexican census of 1980 divides the 579 square miles of the Mexico City urban area, or the Federal District, into 16 *delegaciones*, or municipalities, of which Gustavo A. Madero, with 1.51 million inhabitants, is the largest, and Milpa

International Demographics

PUBLISHER: DORIS WALSH EDITOR: DENISE RUSOFF ART DIRECTOR: CAROL TERRIZZI

International Demographics (ISSN 0731-5414) is published monthly by American Demographics, Inc. P.O. Box 68 Ithaca, New York 14851. Telephone (607) 273-6343. Copyright 1986 by American Demographics, Inc. All rights reserved. Subscription rates are $189 a year/$269 for two years. Multiple subscriptions of three or more billed to the same address are $99 a year.

Alta, with 53,616, the smallest. This division is somewhat different than the one used in the 1970 census when the municipalities of Benito Juarez, Cuauhtemoc, Miguel Hidalgo, and Venustiano Carranza were aggregated into Mexico City Proper. The 8.83 million *chilangos*, as the inhabitants of the Federal District of Mexico are often called, counted in the 1980 census made the Federal District the third largest city in the world, after Shanghai and Tokyo.

Since the 1960s, the Metropolitan Area of Mexico City has expanded beyond the boundaries of the Federal District. It now covers an area of 883 square miles that includes 11 municipalities, with a total population of more than 5 million, in the neighboring state of Mexico. The most important ones are Naucalpan to the west, Zaragoza and Tlalnepantla to the north, and Ecatepec and Netzahualcoyotl to the east. While expansion due north is blocked by the nearly 10,000 feet high Pico Tres Padres, the continuing urban growth of Tlalnepantla and Ecatepec has now all but engulfed this natural obstacle from both sides.

Because the Federal District is governed by national authorities with city officials appointed by the national government rather than elected by the city's residents, Mexico City has had little say in its own government. In response to the mounting feeling that residents must be able to decide the city's priorities, a coalition of four leftist parties and the country's single rightist party have led a campaign to change the Federal District into a new state called Anahuac. This would allow the residents of the district to elect their own governor, legislature, and judiciary, as do Mexico's 31 other states. The present mayor of the Federal District, Ramon Aguirre, was appointed by Mexico's president in December of 1982.

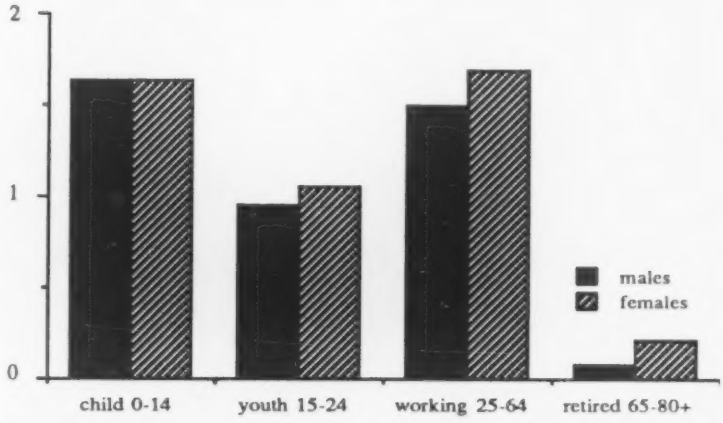
With its peripheral municipalities outside the Federal District, the larger metropolitan area constitutes the second largest population agglomeration in the world, after New York City and its adjacent urban areas. The city proper may be said to extend to Tlatelolco--once a neighboring island in Lake Texcoco--in the north, the Avenida Churubusco in the south, Chapultepec Park in the west, and San Lazaro in the east. Today's suburbs grew out of formerly isolated villages, like Coyoacan, Tlalpan, and Alvaro Obregon, or farm areas. At present, some rural areas remain, predominantly in the municipalities of Cuajimalpa, Milpa Alta, and Tlahuac, and, to a lesser extent, in Tlalpan and Magdalena Contreras. Due to its small population (53,616 in 1980) and predominantly rural characteristics, Milpa Alta is not considered to be part of the Metropolitan Area.

Alvaro Obregon and Coyoacan both existed before the Conquest, and until the 1930s they were separated from the city proper by fields. Coyoacan, which retains much of its colonial atmosphere, is the preferred residence of many artists and intellectuals. Leon Trotsky spent his short-lived exile here in the 1930s. Xochimilco is a favorite weekend spot for families, to hire a boat and travel the canals among the "floating gardens." The upper middle class live mostly in the western part of town, in neighborhoods like Polanco and Lomas de Chapultepec, or in Colonia del Valle, further south. During the economic boom of the late 1970s, many sumptuous upper-class residences, some costing half a million dollars, were constructed in the nearby Bosque de las Lomas district. Another area with expensive mansions is Jardines del Pedregal de San Angel, near the National University.

Industry is mostly concentrated in the northern suburbs of Vallejo, Azcapotzalco, and Naucalpan, along the main roads to Toluca and the northwest. Much of the Azcapotzalco is taken up by a giant refinery of the Mexican state oil company, PEMEX, and several large graveyards. The poor population of the Metropolitan Area live on the eastern urban fringe, in the slums of Iztapalapa, Tlahuac, and Netzahualcoyotl. The latter municipality began its mushrooming growth during the 1960s and now counts about two and a half million inhabitants, mostly in precarious self-help housing. The local name for such slum areas is *ciudades perdidas* or "lost cities." However, among the inner city *colonias*, or neighborhoods, one also finds ghettos like Guerrero and Tepito in downtown Mexico, known for their tough spirit, their famous boxers, and their *fayuca* (contraband), which is peddled at the La Rinconada market. Not far away is the *Zona Rosa*, or "Pink Zone," the favorite hangout for the upper- and upper-

A young city

Population of Mexico City by age groups, 1980, in millions



middle-class youth.

Mexico City has some 1,600 traditional markets that continue to be important outlets for meat and produce. The best known is the La Merced market in Venustiano Carranza, close to the Pino Suarez subway station, considered the largest market place in the Americas. Among other things, the area is known as a center for the local underworld. It is now being moved to a new market complex in Iztapalapa.

The Valley of Mexico lies at an altitude of 7,500 feet, making Mexico City the sixth highest capital in the world. Within the Americas, it loses out only to La Paz, Quito, and Bogota. The average annual temperature is 59 degrees Fahrenheit, with variations from 63 degrees in May to 54 in January. Sudden temperature changes, however, are common. Air pollution is considered by many to be the worst of any major city in the world. Because the valley is surrounded by mountain ranges, thermal inversion often traps the heavy air pollution within the urban bowl. Thin air and heavy sunshine help to create a particularly pungent brownish smog which covers the area most of the time. Annual precipitation averages 28 inches. In the dry season, from November through April, the city is frequently hit by *tolvaneras*, or dust storms, which pick up dust, salt, and dried sewer deposits on the former lakebed of Lake Texcoco, east of the city.

MEXICO'S MAGNET CITY ATTRACTS MILLIONS

The growth of Mexico City relative to the rest of the country started in the late 1800s, but accelerated markedly in the first half of this century. In 1900, the Federal District had little more than half a million inhabitants, making it the largest city in the western hemisphere. This was 4.0 percent of the national population at the time. The 1 million mark was reached during the 1920s. From then until 1950, growth rates increased sharply, despite a temporary slowdown of migration in the 1930s due to the Cardenas land reform, and reached a peak of 7.3 percent annually during the 1940s. In 1950, the population of the Federal District stood at 3.05 million. About half of this growth was attributable to migration. Even in 1980, 29 percent of the population of the Federal District consisted of non-natives. This proportion was highest in Cuauhtemoc (35.8 percent) and Benito Juarez (35.4 percent). The largest numbers of migrants come from the neighboring states of Hidalgo, Guanajuato, Mexico, and Michoacan. According to the Mexican Statistical Yearbook, the number of births in the Federal District in 1979 was 280,578 and the number of deaths 48,421.

Since 1950, growth rates have diminished somewhat as part of the population increase spilled over into the contiguous municipalities of the State of Mexico. More recently, lower birth and migration rates have also slowed growth. By 1960, the population reached 4.87 million, 13.9 percent of the national total, an annual average increase of 6.0 percent over 1950. By 1970, this number had risen to 6.87 million and by 1980 to 8.83 million. The latter represents 13.1 percent of the national population, slightly less than in 1960. The average annual growth rate during the past decade of 2.5 percent has also been slightly lower than the national average. Although the growth rate of the Metropolitan Area, which may boost its population to a startling 25 to 30 million by the year 2000, is still considered alarming by many, it should be mentioned that the 8.83 million inhabitants counted in 1980 fell short of earlier projections, which foresaw population sizes of over 10 million.

Evidently, the rhythm of growth has not been homogeneous. The expansion westward began in the 1860s, when Emperor Maximilian ordered the construction of what is now the Paseo de la Reforma, linking the Zocalo with the palace in Chapultepec Park. Expansion to the east at that time was blocked by the remains of Lake Texcoco, which was partially drained during the 1920s. However, the construction of residential neighborhoods in this area was discouraged because of its alkaline soil. Unsuitable for either

How city neighborhoods differ

	population in 1980		*density* **	*growth rate***		*percent*	*median*
	males	*females*	*in 1980*	*1970-80*	*illite-racy*	*over age 60*	*municipality income**
Alvaro Obregon	306,805	332,408	17,668/sqm	3.3%	7.4%	5.0%	6,018
Azcapotzalco	292,635	308,889	45,127	1.2	5.7	5.3	6,299
Benito Juarez	242,268	302,614	48,891	-1.1	2.8	9.4	8,869
Coyoacan	283,372	313,757	26,119	5.6	5.5	5.2	6,918
Cuajimalpa	45,152	46,048	3,240	9.4	10.0	3.5	5,347
Cuauhtemoc	377,417	437,566	48,891	-1.1	3.7	9.4	6,799
Gustavo A. Madero	734,310	779,050	42,839	2.4	6.0	5.1	6,080
Ixtacalco	278,052	292,325	67,615	1.7	6.3	4.6	5,850
Iztapalapa	622,628	639,726	26,259	8.9	7.7	3.7	5,654
Magdalena Contreras	84,102	89,003	7,206	8.4	7.5	4.0	5,803
Miguel Hidalgo	249,974	293,088	48,891	-1.1	4.9	8.0	6,383
Milpa Alta	26,531	27,085	517	4.6	11.8	5.4	4,112
Tlahuac	72,918	74,005	4,302	8.6	8.7	3.8	5,261
Tlalpan	179,173	189,801	3,084	10.6	7.2	4.1	6,208
Venustiano Carranza	332,800	360,096	48,891	-1.1	5.0	6.2	6,056
Xochimilco	106,465	111,016	4,184	6.2	7.8	4.9	5,608
Federal District	4,234,602	4,596,477	15,253	2.5	5.9	5.7	6,176

** Median monthly income in 1980 Mexican pesos of the economically active population. The official exchange rate in May of 1980 was 22.86 pesos to the dollar.*

*** The population densities and growth rates of the central city municipalities (Benito Juarez, Coyoacan, Miguel Hidalgo, and Venustiano Carranza) have been averaged.*

Source: Direccion General de Estadistica, X Censo General de Poblacion y Vivienda, 1980

agriculture or reforestation, the dry lakebed lay deserted for several years until it became invaded by the slum areas of Netzahualcoyotl during the 1960s. Also during the 1920s, the construction of the 21-mile-long Avenida Insurgentes led the way to the northward expansion of the city. At first a residential area, the Avenida Insurgentes has become one of the leading commercial zones since the 1940s.

The central city of Mexico has grown very little during the past two decades. From a total of 2.23 million in 1950, its population increased to 2.83 million in 1960, stagnated at 2.90 million in 1970, and decreased to 2.60 million in 1980. Traffic congestion and other familiar problems of the central city have led many businesses to move to more distant locations. After spectacular growth of the municipalities to the east, Iztacalco and Iztapalapa, during the 1950s and 1960s, the present expansion of the Federal District is directed towards the south. The fastest growing municipalities in the 1970s were Tlalpan (10.6 percent annually), Cuajimalpa (9.4 percent), Iztapalapa (8.9 percent), Tlahuac (8.6 percent), and Magdalena Contreras (8.4 percent). In absolute terms, however, this growth is still relatively modest: The largest absolute population increases continue to be absorbed by Iztapalapa (740,259 during the 1970s), Gustavo A. Madero (327,253), and Coyoacan (257,683). An even more important portion of the population increase is accounted for by suburbs outside the Federal District such as the Ciudad Satelite, a new middle-class housing project in the State of Mexico, complete with shopping malls and parking lots, or, at the other extreme, the slum areas of Netzahualcoyotl. On the whole, the growth of these municipalities has averaged over 10 percent annually during the past decade. It is primarily due to this rapid growth in the northern periphery that Mexico City is expected to grow into the world's largest metropolitan area by the year 2000.

A YOUNG CITY NOW AND TO COME

The population of Mexico City is very young (even by Latin American standards) and will remain so well into the 21st century despite falling fertility, or the number of children a woman bears in her lifetime. Women in Mexico still commonly bear four or five children in their lifetimes, down from a high of nearly 7 children per woman in the 1950s and 1960s. Of all women in the Federal District in the 25-to-29 age group, 8 percent have had more than four births, a percentage that rises to 22 percent in the 30-to-34 age group.

Yet, despite falling fertility, the population of Mexico City will continue to mushroom due to the disproportionately large numbers of those born during past high-fertility periods entering their reproductive years. In 1980, 37 percent of the total population of the Federal District was under age 15. Another 23 percent of the population was between the ages of 15 and 24. About two out of every three residents, therefore, were under the age of 25. The working population, or those between the ages of 25 and 64 made up 36 percent of the total population. The retired population only amounted to 4 percent of the total population. Even with women having fewer and fewer babies, the population momentum built into these large and youthful population bases will continue to fuel Mexico City's surging growth.

The median age in the Federal District in 1980 was only 20.5 years, 3.1 years more than the even lower national figure. Only six municipalities had median ages over 20 years: Benito Juarez (25.1), Cuauhtemoc (24.1), Miguel Hidalgo (22.8), Venustiano Carranza (21.1), Coyoacan (20.5), and Azcapotzalco (20.1). Not surprisingly, Benito Juarez, Cuauhtemoc, and Miguel Hidalgo also had the highest percentages of elderly: 9.4 percent, 9.4 percent, and 8.0 percent of their populations, respectively, were over 60 years old, compared to an average of 5.7 percent for the Federal District as a whole.

Given such a high proportion of youth relative to the total population, it is not surprising that average household sizes in Mexico City are large. In 1980, the average was 5.02 persons per household for the Federal District as a whole, down

House and home--Mexico City's nearly 2 million registered households (1980)

municipality	*number of private households*	*mean household size*	*electricity*	*running water*	*general sewerage*	*all services*
Alvaro Obregon	122,236	5.20	97.0%	93.6%	72.1%	70.1%
Atzcapotzalco	116,479	5.11	98.1	97.6	90.6	88.6
Benito Juarez	133,973	4.05	99.0	98.9	95.0	94.0
Coyoacan	117,467	5.06	97.8	94.9	60.9	59.9
Cuajimalpa	15,446	5.90	96.3	90.6	60.3	57.3
Cuauhtemoc	198,530	4.06	98.6	98.1	91.9	90.4
Gustavo A. Madero	280,251	5.37	97.8	94.1	85.9	83.8
Ixtacalco	105,103	5.40	97.9	96.9	89.3	87.0
Iztapalapa	224,903	5.58	95.5	81.8	62.2	60.2
Magdalena Contreras	31,178	5.52	95.7	88.2	60.6	58.1
Miguel Hidalgo	117,359	4.57	98.3	97.8	91.3	89.5
Milpa Alta	9,407	5.68	88.4	81.8	24.7	23.4
Tlahuac	24,242	6.04	94.0	89.0	16.6	15.9
Tlalpan	69,747	5.19	94.9	73.9	48.5	47.6
Venustiano Carranza	141,654	4.87	98.1	97.8	91.1	89.1
Xochimilco	39,127	5.53	94.2	92.8	47.2	45.9
Total	1,747,102	5.02	97.4	93.2	78.6	76.8

Source: Direccion General de Estadistica, X Censo General de Poblacion y Vivienda, 1980

Where they work and what they make--Mexico City's economically active population (1980)

type of activity	*EAP*	*median* income*	*percentage without income*
Agriculture, forestry, and fishing	202,336	5,969	8.2%
Mining	333,858	5,859	7.4
Manufacturing industries	407,001	7,862	5.1
Utilities	72,810	7,588	4.9
Building and construction	321,627	4,812	6.6
Commerce	134,858	5,976	8.7
Transport and communication	37,105	6,327	5.5
Finance	162,970	7,994	4.3
Services	222,606	4,454	5.7
Other or unspecified activities	1,398,444	6,339	9.5
Unemployed	18,966	0	54.1
Total	3,312,581	6,176	8.0

** Median incomes are stated in 1980 Mexican pesos.*

Source: Direccion General de Estadistica, X Censo General de Poblacion y Vivienda, 1980

from 5.64 in 1970. The highest municipal figure was 6.04 in Tlahuac. Only in the central city *delegaciones* did average household sizes fall below five persons.

Despite the separation of Church and State, which is assured in the Mexican Constitution, the vast majority (69 percent) of all couples are married both legally and religiously. A much smaller portion (20 percent) are only legally married. Ten percent of couples are made up of consensual unions. Divorce and separation are still relatively rare in Mexico. In 1980, only 0.9 percent of the population of the Federal District over age 12 was divorced and 1.9 percent separated. Only 4,181 divorces were pronounced in 1979.

ROMAN CATHOLICS PREDOMINATE

As elsewhere in Mexico, by far the dominant religion of the Federal District is Roman Catholicism. In the 1980 census, 93.5 percent of its inhabitants declared themselves Catholic, and 2.3 percent had other Christian religions. The remainder consisted mostly of persons without a declared religion, who made up 2.8 percent of the population. These percentages do not vary markedly among municipalities. In addition, the Federal District has a small Jewish community, which amounted to 0.3 percent of its population. It is mostly concentrated in the municipality of Miguel Hidalgo, where it makes up 2.6 percent of the population and, to a lesser extent, in Cuauhtemoc and Benito Juarez.

Ethnically, the city is more heterogeneous. In 1980, 208,500 of the inhabitants of the Federal District spoke some indigenous language, usually Nahuatl, the old language of the Aztecs. Of these, 21,800 did not speak Spanish. The Mexican census does not publish data on numbers of foreign nationals. The number of U.S. citizens in Mexico City, however, is estimated at about 3,000.

FORMAL HOUSING OUT OF REACH FOR HALF OF ALL HOUSEHOLDS

Mexico City's shortage of low-cost housing is estimated at 800,000 units. Rents are typically beyond the purchasing power of the poor population, and high interest rates have discouraged the construction of low-income housing projects. About 60 to 70 percent of all families have no access to the formal housing market. Government-sponsored housing programs of the 1980s are meeting the needs of about 15 to 20 percent of the population, with private construction playing an even more modest role.

Consequently, much of the urban expansion has occurred through the emergence of squatter communities, called *paracaidistas*, or "parachutists" in the local language. Suburbs like Netzahualcoyotl have almost completely sprung up this way. The squatter communities are represented by the National Urban Popular Movement (CONAMUP), which attempts (often successfully) to bring pressure on the government to provide basic urban services.

If solid floors, brick walls, and tile or concrete roofs are used as criteria of sufficient quality of construction, 74 percent of all homes in the Federal District should be so classified. The proportion rises to 92 percent in Benito Juarez and falls to 46 percent in Cuajimalpa. As in most Latin American cities, access to electrical power is almost general, but running water and especially sewerage are less widely available amenities. Moreover, the rapid growth of the Metropolitan Area has made it very difficult to maintain even existing levels of these services. Access to running water in the Federal District actually diminished from 95.7 percent of all homes in 1970 to 93.2 percent in 1980.

Water may indeed be the most serious of all of Mexico City's infrastructural problems. Located in a high valley, surrounded by mountains, far away from any natural water sources, the city has so far drawn its water mostly from the mushy subsoil, at the cost of a continually sinking terrain. Paradoxically, the city also has a flood problem, as rainstorms occasionally dump large volumes of water on the area, which has no natural drainage. Earthquake damage to aqueducts and pipelines further compounds the problem.

Drinking water is brought in from the Cutzamala River Basin, but, due to the high cost of transportation, 70 percent of the $50 million annual water expenditure is subsidized by the government. In the near future, water will have to be pumped up from the even more distant Tecalutla and Amacuzac Rivers, hundreds of miles away.

EDUCATION

Although the government allocates 20 percent of its budget to education, it cannot meet the demands for buildings and personnel. In 1979, 5,230 pre-primary school teachers looked after 171,168 children in 842 kindergartens. There were 2,620 primary schools, with 35,949 teachers and a total enrollment of 1.48 million. The District's 985 high schools, with a total of 30,464 teachers, had an enrollment of 539,870, whereas the 159 vocational schools had 25,700 students. About 75 to 80 percent of the primary and secondary schools are Federally administered, but vocational schools are mostly private.

Illiteracy is an ongoing problem although now only about 6 percent of the population over age 12 is considered illiterate. Only in Milpa Alta and Cuajimalpa does the figure rise to more than 10 percent. A look at literacy by age shows that much progress has been made in reducing illiteracy. While 17.8 percent of the population over age 60 cannot read or write, only 1.9 percent of 15-to-19-year-olds and 2.3 percent of those aged 20 to 24 are so handicapped. Of those over age five, 28.2 percent have an incomplete primary education, 20.4 percent have completed primary school, and 37.4 percent have some instruction beyond the primary level. The municipality of Benito Juarez, with 57.6 percent of its residents over age five with some instruction beyond primary school, topped all other municipalities in the Federal District.

The National Autonomous University of Mexico (UNAM), founded in 1551, is the oldest university of the Americas. With 120,000 students and nearly 16,000 professors, it is the world's tenth largest university in terms of enrollment and the third largest in terms of faculty. In 1954, UNAM was moved to a new campus at Pedregal, in the southwestern section of town. At the other end of the city, in the far north, is the second largest university of the Metropolitan Area, the National Polytechnical Institute, with 62,000 students and 11,000 professors. Other smaller institutions of higher learning in the area are the Schools of Engineering and Arts, the Iberoamerican University, the Autonomous Metropolitan University, the Technological University of Mexico, the La Salle and Anahuac Universities, the Universidad del Valle de Mexico, and the Colegio de Mexico.

ECONOMIC ACTIVITY, INCOMES, AND CONSUMPTION

Data from the 1980 Mexican census on economic activity and income are of poor quality due to the use of insufficiently trained interviewers and the fact that interviewers usually surveyed in their own neighborhoods, evoking some resistance to reveal income data.

The Economically Active Population of the Federal District in 1980 consisted of 2.11 million men and 1.20 million women. Mexico City's labor force is very young, with 59 percent of the men and 66 percent of the women under age 35. By far the largest occupational category (42.2 percent) is that of "Other or Unspecified Activities." Manufacturing industries, mining, and building and construction come next. The principal manufacturing sectors, in terms of labor absorption, are chemicals, metal products, food processing, textiles, clothing, and electric products, in this order of importance. Despite much internal heterogeneity, the construction industry and services are the worst paid sectors, whereas finance has the highest median incomes.

According to an official 1982 report, 10.3 percent of the metropolitan population lived in extreme poverty and an additional 22.6 percent were unable to satisfy their basic needs. As many as 49 percent of the workers earn less than the legal minimum wage. According to data from the 1980 census, 72.9 percent of all children up to age five receive milk most days, 66.7 percent eat an egg, 42.1 percent eat meat, and 31.5 percent receive all of these items most days.

TRANSPORT AND COMMUNICATION

Transport is one of Mexico City's central problems. The factory workers of Naucalpan, Azcapotzalco, or Tlalnepantla usually commute from the poor neighborhoods in the east of town. The upper and the middle classes who live in the west and southwest usually work in the center. The two major universities, with their nearly 200,000 students, are located in the far north and southwest. In all, it is estimated that the inhabitants of Mexico City make about 22 million trips per day by some means of public or private transportation. The 1.6 million private cars, 187,000 trucks, and 66,000 motorcycles (1980) that crowd the streets of the city, burning mostly leaded gasoline, are responsible for 70 percent of the air pollution. The highway system was greatly expanded during the administration of Mayor Carlos Hank Gonzalez (1976-82). Nevertheless, private cars, which make up 95 percent of all vehicles, account for only 16 percent of the daily number of trips made.

The subway, inaugurated in 1969 and expanded during the 1970s, now has three lines in the north-south direction and one in the east-west direction, with a total extension of 65 miles. It covers a substantial portion of the area formed by the central *delegaciones* and Iztacalco, and accounts for about 20 percent of all daily trips. Its fare is one of the lowest in the world. Most travelers, however, still depend on the city's 6,000 buses. These too are heavily subsidized by the government, which took over most bus lines in September of 1981. Apart from regular taxis, the city has a large fleet of *peseros*, low-cost collective taxis that run on fixed routes. The total taxi fleet is estimated at 18,000.

The international airport of Benito Juarez lies in the eastern section of town, in the municipality of Iztapalapa. In 1981, 4.61 million passengers arrived here on national and 2 million on international commercial flights. In addition, the airport handled 4,775 metric tons of

mail and 132,000 metric tons of cargo.

The 20 daily newspapers published in Mexico City account for about half of the entire country's newspaper circulation. The most important ones are *El Universal, Excelsior, La Prensa, Novedades,* and *Ovaciones.* Some print one page in English. The two major weekly journals are *Tiempo* and *Siempre.* The Metropolitan Area also counts 125 cinemas, 30 AM and 24 FM radio stations, five television channels, and a special government-controlled educational television network. The 1980 census did not publish data on mass media, but even in 1970 as many as two-thirds of all homes had both radio and television. In 1981, there were 2.23 million telephones in service in the Federal District, or almost 40 percent of the national total of 5.54 million.

SOURCES OF INFORMATION

The 1980 census of Mexico, including data on the Federal District and the neighboring municipalities of the State of Mexico, is now completely available. During the 1970s, a number of academic studies on the Metropolitan Area were published by Mexican scholars. These focus mostly on industrial development and migration. An example is "Migracion y desigualdad social en la Ciudad de Mexico," by Humberto Munoz, Orlandina de Oliveira, and Claudio Stern, published by the Colegio de Mexico and the Universidad Nacional Autonoma de Mexico in 1977. A similar study, by the same authors in English, was published by the UNESCO in 1982, under the title "Mexico City: industrialization, migration and the labour force, 1930-1970" (ISBN 92-3-101855-8). Other important studies of this type are "La dinamica del crecimiento de la Ciudad de Mexico," by Luis S. Unikel, published in 1976, and "El proceso de industrializacion en la Ciudad de Mexico, 1821-1970," by Gustavo Garza, published by the Colegio de Mexico in 1985. More recent planning information can be found in the *Atlas de la Ciudad de Mexico,* published in 1981 by the Departamiento del Districto Federal, and the *Plan General de Desarrollo Urbano del Districto Federal.* In a lighter vein, some relevant information can be found in the August, 1984 issue of *National Geographic* and in the chapter on Mexico City of Alan Riding's recent portrait of Mexico, entitled *Distant Neighbors,* published by Alfred A. Knopf in 1985 (ISBN 0-394-50005-9). More general information on Mexico is given in Daphne Spain's country profile, in *International Demographics,* volume 1, number 7, of October, 1982.

- Ralph Hakkert

Acknowledgment: The author would like to thank Ana Maria Nogales Vasconcelos for her critical reading and comments on an earlier version of this article.

SPECIAL REPORT

Tokyo's labor force
Part 1: Labor force trends

More married women at work, more new jobs in services than in manufacuring, and more part-time work. Sound familiar?

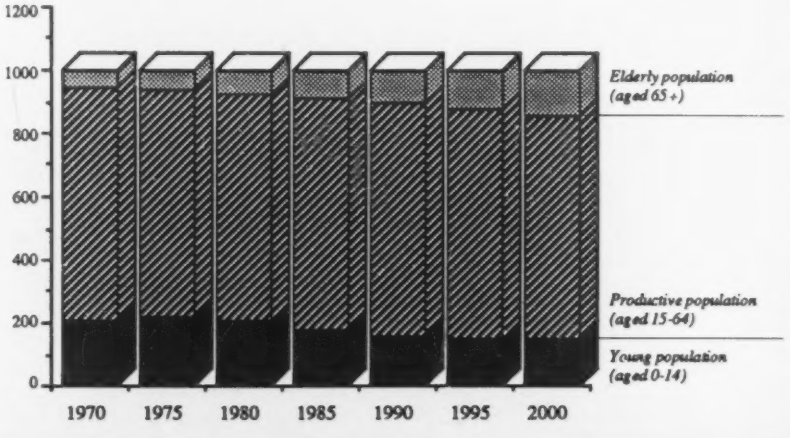
Labor trends in Japan mirror many of the major trends seen in western, industrialized nations . In a three-part series, International Demographics explores Tokyo's labor force, discussing employment trends, worker-household income and expenditure patterns, and retired-worker income and spending patterns.

The year 1986 gave Japan its highest unemployment rate since the government began recording the statistic in 1953. As small as it may seem to those in the West, 2.9 percent unemployment causes many Japanese to furrow their brows. Unemployment in the manufacturing industry brought on by the effects of the high yen came faster than the economy could accomodate.

Even with more time, analysts agree that the reassignment and retraining of big-company industrial labor is no easy task, with three-quarters of what is called Japan Inc. needing at least two to three years to readjust. And for some industries, such as textiles, pulp and paper, primary metals, and transport

(continued)

Labor market pressures to ease as number of youths decreases
population change by age (10,000 persons)



equipment, the future holds out little hope for employment. But as industrial jobs disappear, non-manufacturing jobs are expected to pick up much of the slack after a period of readjustment.

Many of these jobs will be created in the thriving and ever-growing Tokyo-Yokohama metropolitan area, where already 27 percent of all employees of Japan's service sector live and work. With 60 percent of the nation's largest businesses headquartered in Tokyo as well as 40 percent of the nation's government, economic, academic, and financial centers, Tokyo is expected to be the primary site of expanding service-sector employment. Tokyo's sudden growth as a world financial center further fuels this trend. Government analysts see an additional 800,000 joining the 2 million commuters who now cram Tokyo rail and subway lines on their way to the city center.

WOMEN RETURN TO WORK PART-TIME AFTER CHILDREARING

In 1982, nearly 79 percent of Tokyo men over age 15 and about 47 percent of Tokyo women over 15 were employed. This percentage increased markedly for men aged 25 to 54, with 95 percent holding jobs, then decreased with age. However, of men over 65, half still held jobs.

Women, on the other hand, routinely leave their jobs for childbearing and return to the workplace --often as part-time workers--when household duties lessen as children enter the upper levels in school. One out of five women employees is a part-time worker, although a part-time job in Japan is much like a full-time job in the West as far as hours worked goes. In 1984, the typical part-time woman worker in Japan averaged six hours a day, 5.3 days a week.

Much as in other developed countries, the participation rate for Tokyo women peaks at about 70 percent in the 20-to-24 age group, then steadily drops until the 30-to-34 age group is reached. However, more Tokyo women remain in the workforce after marriage--about 50 percent--than do those of any other EC country, except for French women (50 percent) and Danish women (65 percent). And more return after raising children than do most of their EC counterparts, reaching a peak of about 60 percent in the 40-to-44 age group, and then steadily declining to about 45 percent in the 55-to-59 age group. Only the United Kingdom, France, and Denmark show comparable rates.

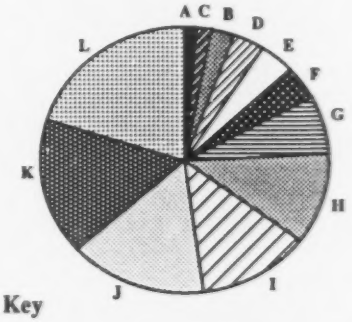
But, as yet, Tokyo women are much more reluctant than American women to quickly rejoin the workforce after childbearing. In the US, 48 percent of employed women who had babies in 1985 were back to work in 1986. Just 10 years earlier, only 30 percent of women returned to work within a year after a birth. This trend is even more pronounced among college-educated American women. Sixty percent of the half million college-educated women who had a child in 1985 were back at their desks within a year or less.

Tokyo women rejoining the workforce is a trend expected to continue as households increasingly depend on women's wages to pay for the spiraling costs of higher education. And women are contributing more to family income. In 1983, the working housewife's share of household income was about 8 percent, up from 6.5 percent only two years previous. In 1983, working housewives between the ages of 45 and 49 accounted for 9.7 percent of household income.

For all Japan in 1983, 56 percent of women employees 35 years or older worked, up from 40 percent in 1970. Nationwide, 60 percent of all married women workers were employed in 1983, up from 32.7 percent in 1962.

At age 60, employment for Tokyo's women falls off sharply, with only about 15 percent still in the labor force. However, in almost all age groups, the participation rates of Tokyo women in the workforce trail nationwide averages, especially at the older age brackets. The opposite trend, however, is true for Tokyo men.

Tokyo's university grads--Where they end up



Key

A Women/other
B Men/other prof. & tech. employ.
C Men/other
D Women/sales
E Men/teachers
F Women/engineers
G Women/other prof. & tech. employ.
H Men/engineers
I Men/sales
J Women/teachers
K Men/clerical
L Women/clerical

WHERE THEY WORK

In 1982, about 3.7 million Tokyo men and 2.2 million Tokyo women over age 15 worked, or about 5.9 million of the estimated 6.8 million persons working in Tokyo. Of those, 3.1 million men and 1.6 million women were paid employees; 541,000 men and 224,000 women were self-employed; and 63,000 men and 290,000 women were workers in family businesses. These figures only include residents of the Tokyo Metropolis and do not count communters from outlying districts. For a more detailed breakdown on the jobs Tokyo residents do, see the accompanying flowchart (p.10).

In the 10-year period between 1972 and 1982, service-industry employment expanded while manufacturing-industry employment decreased. Within the service industry, the services in which employment grew the fastest were specialized services such as civil engineering and construction services; medical services; information, research, and advertising services; and business-related services such as security services.

By 1983, 22 percent of Tokyo-resident workers were employed in services, 37 percent in wholesaling and retailing, 21 percent in man-

facturing, 8 percent in construction, 6 percent in transportation and communication, 5 percent in finance and insurance, and 2 percent in real estate. Of the 465,961 employees of small-scale establishments--those with one to four employees-- nearly half were employed in the wholesale/retail trade and nearly a quarter in services, with 15.7 percent in manufacturing. Of the 1.5 million employees of medium-scale businesses of from 5 to 29 employees, about 38 percent were employed in wholesale and retail, 20 percent in services, and 23 percent in manufacturing. Of the 3.4 million employees of firms with 30 or more employees, 20.5 percent were employed in wholesale and retail, 23.5 percent in services, and 25 percent in manufacturing.

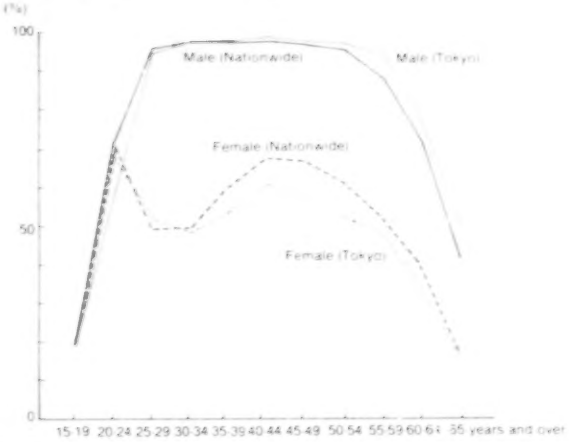
What the future holds

Those who fear further unemployment can take some solace in Tokyo's long-term demographic picture. As shown in the accompanying bar chart, labor-market pressures will eventually ease as Tokyo ages past its 1990s labor-surplus scene brought on by large numbers of the children of the postwar baby boom reaching working age.

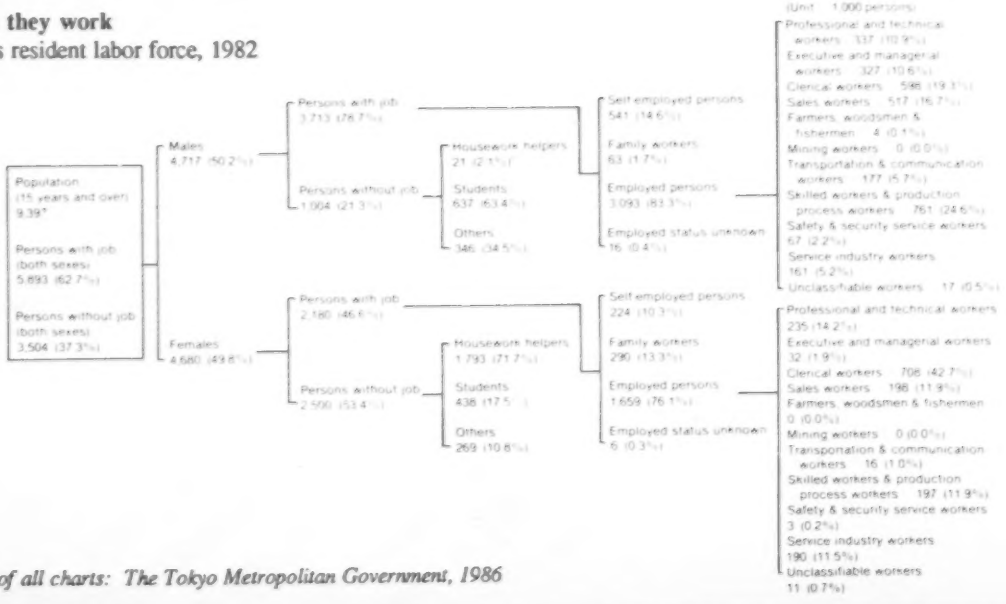
The proportion of Tokyo's total population made up of those 15 to 64 (the productive population or the city's labor pool) will actually decrease from its 1990 projected high of 74 percent of the population to 70.4 percent of the population in the year 2000. Those aged under 15 will decrease from 20.6 percent of Tokyo's total population in 1980 to only 15.3 percent of its total population in the year 2000 as the share of the total population taken up by Tokyo's "silver generation" leaps from 10.3 percent of the total population in 1990 to 14.3 percent in the year 2000.

To absorb the huge crop of new entrants into the labor force in the 1990s--the second wave of baby boomers born between 1971 and 1974-- government planners want to see businesses spread the available work among more people. They suggest increasing annual nonworking days to about 140 days (from about 100) by switching to a five-day work week, encouraging employees to use their full annual vacations, and extending the Golden Week holiday from three days to a full week. To avoid unwanted workers swelling the ranks of the unemployed, companies are being urged to increase part-time employment and consider job-sharing.

Tokyo women workers break for childrearing
Percentage of employed residents , 1982



Where they work
Tokyo's resident labor force, 1982


(Unit: 1,000 persons)
Population (15 years and over) 9,397*
Persons with job (both sexes) 5,893 (62.7%)
Persons without job (both sexes) 3,504 (37.3%)
Males 4,717 (50.2%)
Females 4,680 (49.8%)
Persons with job 3,713 (78.7%)
Persons without job 1,004 (21.3%)
Persons with job 2,180 (46.6%)
Persons without job 2,500 (53.4%)
Housework helpers 21 (2.1%)
Students 637 (63.4%)
Others 346 (34.5%)
Housework helpers 1,793 (71.7%)
Students 438 (17.5%)
Others 269 (10.8%)
Self employed persons 541 (14.6%)
Family workers 63 (1.7%)
Employed persons 3,093 (83.3%)
Employed status unknown 16 (0.4%)
Self employed persons 224 (10.3%)
Family workers 290 (13.3%)
Employed persons 1,659 (76.1%)
Employed status unknown 6 (0.3%)
Professional and technical workers 337 (10.9%)
Executive and managerial workers 327 (10.6%)
Clerical workers 598 (19.3%)
Sales workers 517 (16.7%)
Farmers, woodsmen & fishermen 4 (0.1%)
Mining workers 0 (0.0%)
Transportation & communication workers 177 (5.7%)
Skilled workers & production process workers 761 (24.6%)
Safety & security service workers 67 (2.2%)
Service industry workers 161 (5.2%)
Unclassifiable workers 17 (0.5%)
Professional and technical workers 235 (14.2%)
Executive and managerial workers 32 (1.9%)
Clerical workers 708 (42.7%)
Sales workers 198 (11.9%)
Farmers, woodsmen & fishermen 0 (0.0%)
Mining workers 0 (0.0%)
Transportation & communication workers 16 (1.0%)
Skilled workers & production process workers 197 (11.9%)
Safety & security service workers 3 (0.2%)
Service industry workers 190 (11.5%)
Unclassifiable workers 11 (0.7%)

Source of all charts: The Tokyo Metropolitan Government, 1986

REGIONS

ASIA

Malaysia to up its population

While many Asian countries worry over too many people, Malaysian authorities want more. The Mahathir government would like to see Malaysia's 1986 population of 15.7 million expand to 70 million by 2100, 115 years from now. Already facing a labor shortage, officials see accelerating the population growth rate as the answer to the continued healthy growth of the Malaysian Gross National Product, which now averages between six and seven percent annually.

The already less-than-adequate workforce of about 5.7 million workers is bolstered by 300,000 Indonesian, Filipino, and Thai workers. Yet to effectively pursue Malaysia's industrialization plans of eventually exporting manufactured goods rather than raw materials, the government needs an expanding pool of indigenous labor and a large domestic market.

Increasing the population will require reversing current population trends--trends tied to Malaysia's rising standard of living. As in other developing countries, the number of children women commonly bear decreases as women increasingly enter the workforce, become better educated, and plan smaller families as the need to bear many children to secure their old age and increase the family labor pool lessens. Working Malaysian women are marrying later and having fewer children. About 41 percent of Malaysian women workers marry at age 21 or later. Between 1957 and 1977, the fertility rate-- or the number of children a woman commonly bears in her lifetime--fell from nine to six children. The present fertility rate is down to 3 lifetime births per woman.

Malaysian officials want to slow the rate at which the fertility rate is decelerating so that it would reach 2.1 births per women--the level at which a population just replaces itself--by 2070 rather than the expected 2030 if current trends prevail. This would make the 70-million target achievable by 2100 and would stabilize the population at 73 million by 2150.

But, using Malaysia's current 2.5 percent annual growth rate, the World Bank projects that Malaysian population will only grow to half the government's desired size by 2100, or 35 million people.

To encourage more births, the government pays its employees' maternity bills for up to five children per woman. Officials are trying to get the public sector to follow suit. But, stronger measure and incentives may be necessary to convince up-and-comers to have more children. Malaysians have enjoyed a rising standard of living and are becoming increasingly educated and urbanized. The poverty rate has been cut in half, and the middle class is increasing. In 1980, 19 percent of Malaysian households owned a car, up from 9 percent in 1970; 35 percent owned a motorcyle, up from 13 percent; 28 percent owned a refrigerator, up from 10 percent; and 53 percent owned a TV, up from 12 percent.

Source: Asia Research Bulletin

Singapore's ethnic balance shifting

Too few of the right people? Racial overtones to population programs are not news, but Singapore's Prime Minister Lee couldn't be more frank. Worried over the falling birthrate among Singapore's graduates, Lee set up a Social Development Unit to pay for eligible grads to meet each other on cruise ships or at beach resorts.

Why all the fuss? While fertility rates for Chinese Singaporeans have continued to plunge way below replacement level of 2.1 lifetime births per woman--the number a population needs to replace itself--rates for Indians hover around replacement level and rates for Malays are slightly higher than replacement level. In 1985, 69 percent of births in Singapore were to Chinese Singaporeans, although Chinese Singaporeans made up 76.4 percent of the population; 19 percent were to Malay Singaporeans, although they made up about 15 percent of the population; and 7.7 percent of births were to Indian Singaporeans, although they made up 6.4 percent of the population.

NORTH AMERICA

Canada's women workers make headway

In 1984, Canadian women working full-time made 66 percent of their male counterparts' wages, up from only 58 percent of the earnings of men in 1967. This upward trend in women's earnings relative to men's is

expected to continue as women marry later, invest more years in education, and have smaller and later families. In fact, the better educated and the younger a woman is, the better chance she has at equaling the income of her male counterpart.

Young working women in 1984 fared better than women of their mother's generation with a much narrower gap between their earnings and the earnings of men. Among 15-to-19-year-olds, for example, women made 83 percent of what men made, and among 20-to-24-year-olds, women made 79 percent of their male counterpart's earnings. The older the worse off, with 45-to-54 year-olds only making 61 percent of male earnings in 1984.

Increased educational attainment also upped women's share. Women with eight or less years of formal education only earned 57 percent of the earnings of equally educated men, while women with postsecondary schooling made 70 percent of the wages of equally educated men.

Being single also made a difference. Married women working full-time all year earned 61 percent of men's earnings, but single women earned 89 percent of men's earnings. And, although 63 percent of all husband/wife families in Canada are dual-earner households, in only 22 percent of them did the wife make more than her husband.

For more detailed information on the earnings of men and women in Canada, order *Earnings of Men and Women, 1984* from Statistics Canada's Household Surveys Division at (613) 991-6898. This report compares 1984 earnings of men and women by such characteristics as age, education, occupation, and marital status. Also presented are data on the earnings contributions of husbands and wives to family income. The data are drawn from the Survey of Consumer Finances conducted in April 1985 and are the latest data showing annual earnings by sex.

EUROPE

European students trail their American and Japanese counterparts

With all the hubbub over Japanese education versus American education, no one here is paying much attention to just how well the Europeans are educating their youth. But the E.C.'s Economic and Social Committee is concerned over the results of their recent study of European education in which they found European students not as well trained as their Japanese and American counterparts.

For one, although school-leaving age for European youth is about the same as it is for Japanese and American youth, 86 percent of American students and 94 percent of Japanese students go on for higher education, compared to only 50 percent of European youth. And a larger proportion of Japanese and American students attend university, 39 percent and 44 percent respectively. These figures compare to only 30 percent of French students, 26 percent of Italian students, 18 percent of German students, 15 percent of those in the Netherlands, and 7 percent of British students.

Funding is not the problem, the study found. The student-teacher ratios found in Japan, the US, and Europe were roughly comparable, and funding competitive.

In only one area, however, the Europeans outshone the Americans, although the Japanese held the lead. Sixty-eight percent of all degrees awarded in Japan were science degrees, as compared to 44 percent in the U.K., 42 percent in Germany, and 40 percent in Italy. The US trailed with only 22 percent of its degrees awarded in science.

COMING UP

Beijing--The latest data from just-translated sources

How Tokyo workers spend their yen

International Demographics
P.O. BOX 68, ITHACA, N.Y. 14851

FIRST CLASS MAIL
U.S. POSTAGE
PAID
PERMIT NO. 780
ITHACA, NY 14850

OGARNRSCNGR14ZA 12/31/88
SUSAN GARNER, STE800
CONGRESSIONAL INFO
4520 EAST WEST HWY
BETHESDA, MD 20814